

CLASS EXERCISES

One factor of each trinomial is given. Give the other factor.

- $x^2 - 13x + 36$, $(x - 4)$
- $2x^2 + 13x - 24$, $(2x - 3)$
- $4a^2 + 4ab - 3b^2$, $(2a + 3b)$
- $3s^2 + 25s + 42$, $(s + 6)$
- $3x^2 + 8x - 35$, $(x + 5)$
- $3c^2 - cd - 4d^2$, $(3c - 4d)$

Algebra 2
Unit #5
WS #3

Tell whether each trinomial can be factored into two identical binomials.

If so, give those factors. If not, give a reason for your answer.

- $x^2 + x + 1$
- $x^2 - 2x + 1$
- $x^2 + x + 2$

PRACTICE EXERCISES

Factor.

- $x^2 + 5x + 6$
- $x^2 - 6x + 8$
- $t^2 - 12t + 27$
- $r^2 - 11r + 18$
- $x^2 + 10x + 16$
- $y^2 + 15y + 36$
- $x^2 - 5x - 14$
- $x^2 + x - 20$
- $x^2 - 3x - 40$
- $c^2 + 2c - 63$
- $d^2 + 10d - 75$
- $f^2 - 7f - 44$
- $3y^2 + 31y + 36$
- $2y^2 - 19y + 24$
- $5r^2 + 23r + 26$
- $2m^2 - 11m + 15$
- $5t^2 + 28t + 32$
- $2p^2 - 27p + 36$
- $3y^2 + 7y - 20$
- $5y^2 + 12y - 32$
- $7z^2 - 8z - 12$
- $2z^2 + z - 28$
- $6c^2 + 11c + 4$
- $28a^2 + 13a - 6$
- $4a^2 + ab - 15b^2$
- $14x^2 + 11xy + 2y^2$
- $3x^2 - 8xy - 16y^2$
- $x^2 - 9x - 13$
- $x^4 - 8x^2 + 15$
- $2x^4 + x^2 - 6$
- $12y^2 - 16y - 35$
- $12x^2 - 11x - 56$
- $15c^2 - 34c - 16$
- $21x^2 + 88x + 60$
- $24m^2 + 31mp - 15p^2$
- $36r^2 + 91rs - 22s^2$
- $21x^2y^2 - 59xy + 40$
- $49m^2n^2 + 7mn - 72$
- $12x^4 + x^2y^2 - 20y^4$
- $4x^4 + 5x^2y^2 - 6y^4$
- $4x^2 + 8x + 9$
- $5x^2 - 3x + 17$
- $x^8 - 2x^4y^4 - 15y^8$
- $6x^6 - x^3y^3 - 35y^6$
- $12x^4 - 11x^2y - y^2$
- $15x^4 + 29x^2y - 2y^2$
- $12x^2y^2 + 5xyz - 3z^2$
- $6a^2b^2 + 11abc + 4c^2$
- $4a^2b^2c^2 - 25abc + 6$
- $6x^2y^2z^2 - xyz - 5$

Factor. Assume all exponents are positive integers.

- $x^{2n} - 8x^n + 15$
- $x^{2n} + 3x^n - 28$
- $2x^{6a} - 11x^{3a} + 14$
- $6x^{2f} + 19x^f + 15$
- $6x^{4m} - 5x^{2m} - 50$
- $12y^{2a+2} - 7y^{a+1} - 12$
- $24x^{2n+4} + 17x^{n+2} - 20$
- $30x^{4a} + 11x^{2a}y^{b+1} - 30y^{2b+2}$
- $15y^{6b+2} + 19y^{3b+1}x^c - 5x^{2c}$
- $42x^{4a+10} + 17x^{2a+5}y^{a-3} - 15y^{2a-6}$